Polymerisation Inhibition Process by Means of Sodium Chlorite, by Masaru Yamasaki, Akira Takahashi, 10 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XIV, 1957, pp 359-362.

SLA 60-18389

Sci
Vol. IV, No 11.
Jun 62

199,311

Proton Magnetic Resonance in Plasticized Polymers,
by A. Odajima, M. Nagai.
JAPANESE, per, Kobunshi Kagaku, Vol 14, 1957,
pp 512-516.
NRC 69-11242-07D

Sci/Chem
July 69

387-322

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Potassium Persulphate-Sodium Bisulphite Potassium Thiocyanate Redox System Polymerization, Rpt 10, by Akira Takahashi, Isamu Yamazaki, 10 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XIV, No 147, 1957, pp 363-366.

SLA 59-15267

Sci
Dec 59
Vol 2, No 5

104,267

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Studies on the Drawing of Viscose Layer. Part III. Effect of the Degree of Orientation on Dynamic Properties, by Y. Shinohara, H. Tanzawa, 8 pp.

KOBUNSHI, per, Kobunshi Kagaku, Vol XIV, No 139, pp 485-492.

ATS 951293

Sci
Jan 60
Vol 2, No 5

149 789

Graft Copolymerization of Polyethyl Acrylate With Acrylonitrile, by H. Sumitomo, I. Yahama, 12 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XIV, 1957, pp 556-560.

SLA 60-18328

Sci
Vol IV, No 11
Jun 62

199,244

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Polymerization of Styrene With Ziegler's Catalyst.
by M. Yamazaki.

JAPANESE, per, Kobunshi Kagaku, Vol XV, No 153,
1958, pp 49-54.

ATS J-1909

Sci - Chem
Dec 59

104,085

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Imoto, Saburo and Kominami, Tsugio.
POLYMERIZATION OF VINYL ACETATE IN THE PRESENCE OF POLYMER. [1962] [9]p. 4 refs.
Order from SLA $1.10 62-20088

Trans. of Kobunshi Kagaku (Japan) 1958, v. 15, p. 60-64.

DESCRIPTORS: *Acetates, *Vinyl radicals, Polymers, Synthesis, Polymerization, Chemical bonds.

The polymerization of vinyl acetate in the presence of polyvinyl acetate (PVAc) containing double bonds on the main chain was examined at 60°C. Degradative chain transfer occurs, and therefore the rate and degree of polymerization decrease. From measuring the double bonds of the produced polymer, monomer transfer constant = 3×10^{-4} and $k_r k_p = 210^{-2}$ are obtained by kinetic analysis, where k_r = activation rate
(Materiale--Textiles, TT, v. 9, no. 8) (over)

62-20088

I. Imoto, S.
II. Kominami, T.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Eguchi, Tamotsu and Matsumoto, Masakazu.
CARBOXYL GROUPS IN POLYVINYL ALCOHOL. [1962]
[11]p. 7 refs.
Order from SLA $1.60 62-20087

Trans. of Kobunshi Kagaku (Japan) 1958, v. 15, p. 83-88.

DESCRIPTORS: *Polyvinyl alcohol, *Carboxyl radicals, Polymerization.

(Materials--Plastics, TT, v. 9, no. 11)

62-20087

I. Eguchi, T.
II. Matsumoto, M.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Matsumoto, Masaku and Imai, Kiyokazu.
INFRARED SPECTRA OF THE MODEL COMPOUNDS OF POLYVINYL ALCOHOL.. [1962] [8]p. 6 refs.
Order from SLA $1.10 62-20090

Trans. of Kobunshi Kagaku (Japan) 1958, v. 15, p. 160-164

DESCRIPTORS: *Polyvinyl alcohol, *Infrared spectroscopy, Polymers, Chemical compounds, Chemical bonds.

(Chemistry--Organic, TT, v. 9, no. 9)

62-20090

I. Matsumoto, M.
II. Imai, K.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Okamura, Seizo and Yamashita, Takao.
POLYMERIZATION IN THE PRESENCE OF POLYMERS, I. EMULSION POLYMERIZATION OF VINYL ACETATE IN THE PRESENCE OF POLYVINYL ALCOHOL. [1962] 11p. 7 refs.
Order from SLA $1.60 62-20089

Trans. of Kobunshi Kagaku (Japan) 1958, v. 15, p. 165-169.

DESCRIPTORS: *Polyvinyl alcohol, *Acetates, *Vinyl radicals, *Polymerization, Colloids, Polymers.

(Chemistry--Organic, TT, v. 9, no. 9)

62-20089

I. Title: Graft polymers
I. Okamura, S.
II. Yamashita, T.
III. Title: Emulsion...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Emulsion Polymerisation of Vinyl Acetate With Partly Saponified Polyvinyl Acetate as the Protective Colloid II., by S. Okamura, et al.

per Kobunshi Kagaku

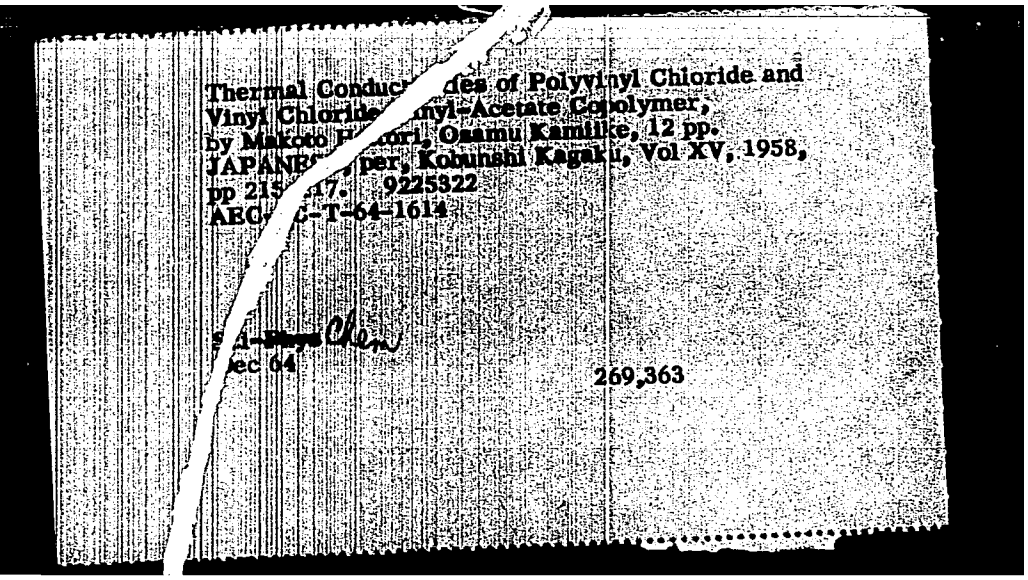
JAPANESE, Chemistry of High Polymers, No 15, 1958, pp 170-174.

CSIRO

Sci - Chem
Mar 62

189,275

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0



Thermal Conduc[illegible]des of Polyvinyl Chloride and
Vinyl Chloride-[illegible]nyl-Acetate Copolymer,
by Makoto [illegible]ori, Osamu Kamilike, 12 pp.
JAPANE[illegible]per, Kobunshi Kagaku, Vol XV, 1958,
pp 215-[illegible]7. 9225322
AEC-[illegible]-T-64-1614

[illegible]-Type Chem
Dec 64

269,363

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Col imetric Determination of the Methylol
Meth l Ether Group, by Akira and Yamazaki
Tak ashi, Isamu, 11 pp.

JAPA BZ, Per, Kobunshi Kagaku, 1958, Vol XV,
No 15 , pp 228-232.

SLA 59-10508

Sci
Oct 59
Vol 2, 1 3

99,879

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Anomalies Caused by Resins Prepared by the Strong-Alkali Catalyzed Method, in Idometric Analysis, 16 pp.

JAPANESE, Per, Kobunshi Kagaku, 1958, Vol XV, No 156, pp 232-23 .

SLA 59-10507

Bai
Oct 59
Vol 2, No 3

99,900

The[illegible]al Conductivities of Polystyrene and Polyethylene,
by [illegible] Hattori, Osamu Kamiike, 9 pp.
[illegible]PANESE, per, Kobunshi Kagaku, Vol XV, 1958,
pp 281-286.
AEC-SC-T-64-1004

Sci-Phys
Mar 65

274,951

Measurements of Electric Resistance of the Fibers, by Hajime Ishii, 11 p.

JAPANESE, per, Kobunshi Kagaku, 1958, Vol XV, No 159, pp 412-416.

SLA 59-17082

Sci
Jan 60
Vol 8, No 8

105,518

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

On the Gel Point in the Condensation Reaction of Methylolpolyacrylamide, by Hiroyoshi Kamogawa, 11 pp.

JAPANESE, Per Kobunshi Kagaku 1958, Vol XV, No 156, pp 238-242.

SLA 59-10506

Sci
Oct 59
Vol 2, No 3

99,907

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Mechanical Relaxation Time Distribution in Crystalline Polymers, by A. Miyake.

XEK
JAPANESE, per, Kobunshi Kagaku, Vol XV, 1958, pp 585-590.

NLL Ref: 5828.4 1962 (10150)
Eg (Loan)

Sol - M/M
Jul 63

238,380

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Mechanics of the Crease of Fabrics, Part IV. Change in the Twist (Helix) Angle on Bending a Single Yarn, by M. Suzuki, 8 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XV, No 162, 1958, pp 647-653.

ATS-01L30J

Sci
Jan 60
Vol 2, No 5

104,788

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Preparation and Properties of Elastic Linear Polyurethanes, by Yoshio Iwakura, Yasuo Taneda, 12 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XV, No 162, 1958, pp 654-659.

SLA 59-15240

Sci
Dec 59
Vol 2, No 4

103,122

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Ester Interchange Reaction of Polyethylene Isophthalate with Ethylene Glycol, by Misao Sumoto, Akira Kito, Ryozo Inoue, 16 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XV, No 162, 1958, pp 664-670.

SLA 59-15237

Sci - Chem
Dec 59
Vol 2, No 4

102,760

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Viscosity of Concentrated Acrylonitrile Copolymer Solutions, by Masao Takahashi, Masawoo Nakanishi, 14 p.

JAPANESE, per, Kobunshi Kagaku, 1959, Vol XVI, No 165, pp 35-39.

SLA 59-17081

Sci
Jan 60
Vol 2, No 8

105578

Okamura, S., Higashimura, T., and Imanishi, Y.
LOW TEMPERATURE CATIONIC POLYMERIZATION OF α-METHYLSTYRENE AND PROPERTIES OF THE POLYMERS OBTAINED. I. THE SOLVENT EFFECT. [1961] 13p. 9 refs.
Order from RIS $12.50 RIS rept. 61112

Trans. from Kōbunshi Kagaku (Japan) 1959, v. 16, no. 165 [p. 45-48].

DESCRIPTORS: *Styrenes, *Methyl radicals, Polymerization, Temperature, Velocity, *Polymers, Molecular weight, Solubility, Solvent action, Catalysts, Catalysis.

(Chemistry--Organic, TT, v. 7, no. 7)

61-22964

I. Okamura, S.
II. Higashimura, T.
III. Imanishi, Y.
IV. RIS-61112
V. Title: Solvent...
VI. Research Information Service, New York

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Kinetic Studies on the Methylolation Reaction, by Kikuo Kooda, 20 p.

JAPANESE, per, Kobunshi Kagaku, 1959, Vol XVI, No CLXV, pp 62-68.

SLA 59-17080

Sci
Jan 60
Vol 2, No 8

105,464

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Okamura, S., Higashimura, T., and Imanishi, Y. LOW TEMPERATURE CATIONIC POLYMERIZATION OF α-METHYLSTYRENE AND PROPERTIES OF THE POLYMERS OBTAINED. II. CHARACTERISTICS OF THE POLYMERS OBTAINED AT LOW TEMPERATURE. [1961] 11p. 6 refs.
Order from RIS $13.00 Ris rept. 61113

Trans. of Kōbunshi Kagaku (Japan) 1959, v. 16 [no. 166] p. 129-132.

DESCRIPTORS: *Styrenes, *Methyl radicals, Polymerization, Temperature, *Polymers, Solubility, Density, Solvent action, Catalysts, Catalysis.

See also (RIS rept. 61112)

(Chemistry--Organic, TT, v. 7, no. 7)

61-22963

I. Okamura, S.
II. Higashimura, T.
III. Imanishi, Y.
IV. Title: Characteristics...
V. RIS-61113
VI. Research Information Service, New York

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Degree of Polymerization Obtained in the Total Polymerization Process, by Seiso Okamura, Katagiri Keiso, 8 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVI, No 157, 1959, pp 173-175.

SLA 60-18390

Sci
Vol IV, No 11
Jun 62

199,241

Okamura, S., Higashimura, T., and Ogawa, Y. KINETIC STUDIES ON THE COUNTERIONS IN TI CATIONIC POLYMERIZATION OF STYRENE. III. POLYMERIZATION CARRIED OUT WITH BORON TRIFLUORIDE COMPLEXES. [1961] 14p. 14 refs. Order from RIS $13.50 RIS rept. 61111

Trans. of Kōbunshi Kagaku (Japan) 1959, v. 16, p. 239-243.

DESCRIPTORS: *Styrenes, *Polymerization, Polymers, Boron compounds, Fluorides, Complex compounds, Textiles.

(Chemistry--Organic, TT, v. 6, no. 6)

61-25007

I. Okamura, S.
II. Higashimura, T.
III. Ogawa, Y.
IV. Title: Polymerization...
V. RIS-61111
VI. Research Information Service, New York

176701

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Syntheses of Condensation and Addition Polymers. II. Syntheses of High Polymers Containing Two Different Linkages by Polyaddition or Polyaddition-Condensation, by R. Oda, et al.

JAPANESE, per, Kobunshi Kagaku, Vol XVI, 1959, pp 260-266.

AMS JJ-1855

Sci. & Chem

Jan 60

105,064

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Syntheses of Condensation Polymers and Addition Polymers. III. Syntheses of Polymers Having Regularly Repeating Groups by Polycondensation (Part I), by R. Oda, et al.

JAPANESE, per, Kobunshi Kagaku, Vol XVI, 1959, pp 266-270.

ATS JJ-1856

Sci - Chem

Jan 60

105,063

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Steam and Heat Setting of Nylon 6 Fibres. 2. The Effect of Heat Treating Nylon 6 Fibres on the Variations of its Dyeing Properties and Fine Structure, by M. Tsuruta, A Koshimo.
JAPANESE, per Kobunshi Kagaku 1959, Vol. 16, No. 168, 1959, pp 274-280
NLL/5828.4 1965 (5665)

GV/112/TK/479

Sci -
Aug 67

338-508

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Vinyl Polymerization. Pt. 36, Copolymerization of Acrylamide with Acrylic Acid, by Minoru Imoto, Takayushi Otsu, Taiichi Higuchi, 14 p.

JAPANESE, per, Kobunshi Kagaku, 1959, Vol XVI, No 169, pp 324-329.

SLA 60-10116

Sci
Apr 60
Vol XIX, No 3

112,080

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

The Relationship Between Heat-Setting and Swelling, by Motohiro Tsuruta, Akio Koshimo, Takashi Tagawa, 12 p.

JAPANESE, per, Kobunshi Kagaku, 1959, Vol XVI, No 170, pp 333-336.

SLA 60-10447

Sci
Apr 60
Vol III, No 3

112,017

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Permeability of High Polymer Film. Part II. Automatic Recording, Gas-polymer Film Permeameter by Strainage and on the Approximation by Early Method, by Y. Ito.
JAPANESE, per, Kobunshi Kagaku, Vol 16, No 171, 1959, pp 381-385.
NTC-69-16298-07D

Sci-Chem
Feb 70 402,903

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

On the Copolymerization of Acrylamide With Vinyl Acetate, by Minoru Matsuda, Takayuki Otsu, Minoru Imoto, 13 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVI, No 171, 1959, pp 437-440.

SLA 60-16677

Sci

Mar 62

190,052

Vol IV, No 6

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Retardation of the Polymerization Reaction by the Use of Nitro-Derivatives of Phenol, by Kazuo Nakatsuka, 9 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVI, No 171., 1959, pp 453-455.

SLA 60-14263

Sci
Jan 62
Vol III, No 10

179, 918

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

On the Increase of the Degree of Polymerization During the Polymerization Process, by Taizo Uno, Keinosuke Yoshida, 12 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVI, No 171, 1959, pp 471-474.

SLA 60-14264

179,914

Sci
Jan 62
Vol III, No 10

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Synthesis of Model HX Substances for Polyacrylonitrile and Its Copolymers. I. Synthesis of Model Substances for Polyacryonitrile-1, by T. Takata, et al, 18 pp.

XXXXXXX
JAPANESE, per. Kobunshi Kagaku, Vol XVI, No 17, 1959, pp 693-698.

SLA 60-18388

Sci
Vol. IV, No 11
Jun 62

199, 245

Takahashi, Masao, Watanabe, Masamoto, and Kinoshita, Yukio.

EFFECTS OF DRAWING ON THE PHYSICAL PROPERTIES AND ORIENTATION OF ACRYLIC FIBERS. Rept. no. 5 of Studies on Acrylic Fibers. [1960] 18p. 4 refs.

Order from SLA mi$2.40, ph$3.30 60-18129

Trans. of Kobunshi Kagaku (Japan) 1959, v. 16, no. 176, p. 713-719.

Undrawn acrylic fibers spun in glycerin bath and in ethylene glycol bath were drawn, and studies were made of the changes of strength, elongation, and density by drawing; of the degree of orientation and lateral order by X-rays, and of the cross-sectional shape by the microscope. The density of an undrawn filament which was spun in an ethylene glycol bath was extremely small. Although the density increased by drawing, the degree of this increase was small when drawn to over 4 times. The density of an undrawn filament (Materials--Textiles, TT, v. 5, no. 3) (over)

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Takahashi, Masso, Shinohara, Yasuo, and Watanabe, Masamoto.
CROSSLINKING OF POLYACRYLONITRILE FIBER BY IRRADIATION WITH ELECTRON RAYS. Rept. no. 6 of Studies on Acrylic Fibers. [1960] 13p. 7 refs.
Order from SLA mi$2.40, ph$3.30 60-18130

Trans. of Kobunshi Kagaku (Japan) 1959, v. 16, no. 176, p. 720-723.

The effects of irradiation by high speed electrons induced from "Van de Graaff" on the swelling properties of polyacrylonitrile monofilaments were investigated. The experimental relationship between sol fraction and radiation dose shows good agreement with that required by A. Charlesby's theory (J. Polymer Sci. 11: 513, 1953). The ratio of degradation to crosslinking occurring by irradiation was about 40%. The crosslinking index per monomer unit was 2.32×10^{-3} per 1 Mrad. The swelling properties of the crosslinked polyacrylonitrile were also studied as a function of cross- (Materials--Textiles, TT, v. 5, no. 3) (over)

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Light Scattering of Optical Glasses, by S. Kozawa.
JAPANESE, per, Kobunshi Kagaku, Vol 17 pp. 104-7, 1960.
NTC 69-10735-20P

Sci-Phys
July 69

386,577

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Effect of Agitation on Polymerization of Acrylonitrile in Aqueous and in Emulsion Phase Initiated by Persulfate-Triethanolamine Redox System and Persulfate Alone, by S. Noguchi, M. Watanabe, 18 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVII, No 178, 1960, pp 103-114.

SLA 60-18387

Sci

203,246

Jun 62

The Kinetics of Saponification of Vinyl Acetate-Methyl Acrylate Copolymers, by Ichiro Sakurada, Sakaguchi, Yasuyoshi, 19 14 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVII, No 178, 1960, pp 115-119.

SLA 60-18153

203, 252

Sci

Jun 62

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Higashimura, T. Kodama, T., and Okamura, S.
LOW-TEMPERATURE CATIONIC POLYMERIZATION OF ALKYL VINYL ETHERS AND THE PROPERTIES OF THE POLYMERS OBTAINED. IV. INFLUENCE OF THE POLYMERIZATION CONDITIONS ON THE PROPERTIES OF THE POLYVINYL ISOBUTYL ETHER. [1961] 13p. 11 refs.
Order from RIS $15.00 RIS rept. 61119

Trans. from Kōbunshi Kagaku (Japan) 1960, v. 17, no. 179.

DESCRIPTORS: *Polymerization, Vinyl radicals, *Ethers, *Polymers, Physical properties, Butyl radicals, Alkyl radicals

(Chemistry--Organic, TT, v. 6, no. 3)

61-22969

I. Higashimura, T.
II. Kodama, T.
III. Okamura, S.
IV. Title: Influence...
V. RIS-61119
VI. Research Information Service, New York

180581

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Shinohara, Yasuo.
MODIFICATION OF FIBERS BY RADIATION-INDUCED GRAFT COPOLYMERIZATION. [1961] [20]p. (foreign text included) 9 refs.
Order from SLA $1.60 61-16765

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 180, p. 197-201.

DESCRIPTORS: *Nylon, Cellulose, Synthetic fibers, Textiles, Polymers, *Copolymerization, Radio Chemistry.

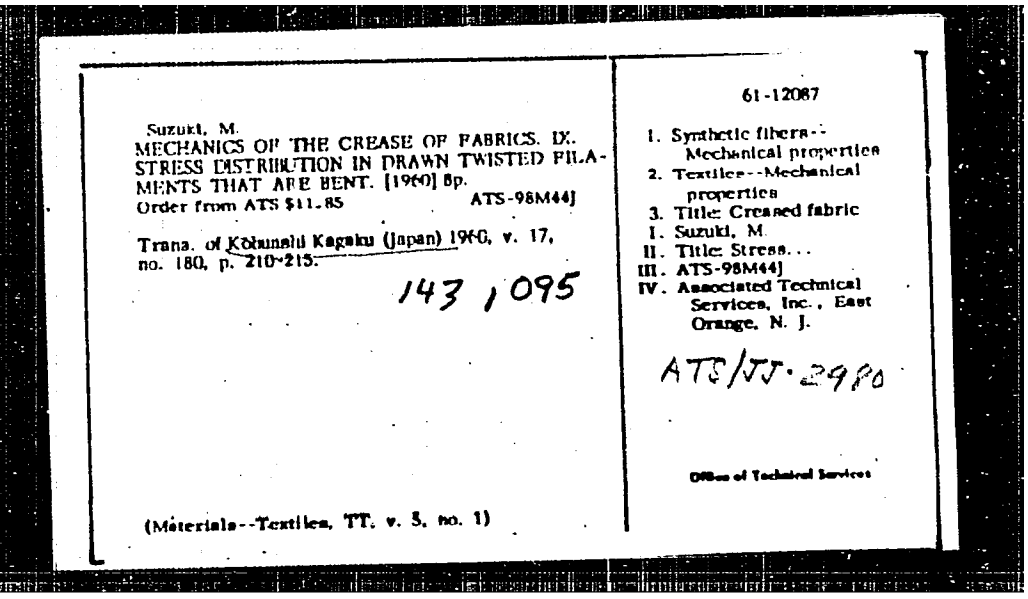
Conventional fibers such as cellulose and nylon are capable of forming graft polymers easily when irradiated first with radioactive rays, and then placed in conjunction with a vinyl monomer or a solution thereof. At the time of polymerization, it is effective when water or methanol is co-present. When a vinyl polymer with a high transition point is grafted on, the fiber becomes hard as a rule, while when the transition point is low, it becomes soft. (Author)

61-16765

1. Title: Graft polymers
I. Shinohara, Y.

Office of Technical Services
(Materials--Textiles, TT, v. 6, no. 6)

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0



Suzuki, M.
MECHANICS OF THE CREASE OF FABRICS. IX. STRESS DISTRIBUTION IN DRAWN TWISTED FILAMENTS THAT ARE BENT. [1960] 8p.
Order from ATS $11.85 ATS-98M44]

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 180, p. 210-215.

143 1095

(Materials--Textiles, TT, v. 5, no. 1)

61-12087

1. Synthetic fibers--Mechanical properties
2. Textiles--Mechanical properties
3. Title: Creased fabric
I. Suzuki, M.
II. Title: Stress...
III. ATS-98M44]
IV. Associated Technical Services, Inc., East Orange, N. J.

ATS/TT-2980

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Uematsu, Ichitaro and Uematsu, Yoshiko.
EFFECT OF CRYSTALLINITY ON GLASS TRANSITION TEMPERATURE AND VOLUME EXPANSION COEFFICIENT. Rept no. 1. on The Effect of Crystallinity on the Physical Properties of High Polymers. [1961] [20]p. 18 refs.
Order from SLA $1.60 61-16573

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 180, p. 222-226.

DESCRIPTORS: *Glass, *Crystal structure, *Transition temperature, Polymers, Heat treatment.

The crystallinity of polyethyleneterephthalate was successively changed by the thermal treatment of the amorphous film at 120, 150, 210 and 238°C. The effect of crystallinity on the glass transition temperature, Tg, and on the volume expansion coefficient, α, of the sample were determined from volume measurements (Materials--Ceramics, TT, v. 6, no. 8) (over)

61-16573

I. Uematsu, I.
II. Uematsu, Y.
III. Title: Effect...

195161

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Higashimura, T., Sunaga, Y., and Okamura, S. LOW TEMPERATURE CATIONIC POLYMERIZATION OF ALKYL VINYL ETHERS AND THE PROPERTIES OF THE POLYMERS OBTAINED. [V] SOME LOWER ALKYL VINYL ETHERS AND THE PROPERTIES OF THE POLYMERS. [1961] 12p. 10 refs.
Order from RIS $16.00 RIS rept. 61118

Trans. of [Kōbunshi Kagaku] (Japan) 1960, v. 17, no. 180, p. 257-262.

DESCRIPTORS: *Polymerization, Vinyl radicals, *Ethers, *Polymers, Physical properties, Alkyl radicals.

(Chemistry--Organic, TT. v. 6, no. 5)

61-22968

I. Higashimura, T.
II. Sunaga, Y.
III. Okamura, S.
IV. Title: Some...
V. RIS-61118
VI. Research Information Service, New York

180580

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Mechanics of Creases in Fabrics. VIII. Stress Distribution in Bent Undrawn Tetron Filaments, 6 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVII, No 181, 1960, pp 207-210.

ATS-99N44J

203,554

Sci
Jul 62

Vol 4, No 12

Uematsu, Yoshiko and Matsudaira, Tadashi.
EFFECT OF CRYSTALLINITY ON VISCOELASTIC PROPERTIES. Rept. no. 2 on The Effect of Crystallinity on the Physical Properties of High Polymers. [1961] [25]p. (foreign text included) 18 refs.
Order from SLA $2.60 61-16574

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 181, p. 305-311.
Another translation is available from ATS $16.80 as ATS-94M44] [1960] 10p.

DESCRIPTORS: *Polymers, Crystal structure, Viscosity, Elasticity.

The effect of crystallinity on the mechanical behavior was studied by the vibrating reed method. Samples of polyethyleneterephthalate were crystallized at 120°C and 225°C. Q-1 goes through a maximum at about 100°C. The temperature shift of this maximum is rapid
(Materials--Plastics, TT, v. 6, no. 8) (over)

61-16574

I. Uematsu, Y.
II. Matsudaira, T.
III. Title: Effect...

125162

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Uematsu, Yoshiko.
DYNAMIC ELASTIC MODULUS OF POLYETHYLENE. Rept. no. 3 on The Effect of Crystallinity on the Physical Properties of High Polymers. [1961] [18]p. 7 refs.
Order from SLA $1.60 61-16570

Trans. of Kobunshi Kagaku (Japan) 1960, v. 17, no. 181, p. 311-315.
Another translation is available from ATS $12.00 as ATS-95M44] [1960] 7p.

DESCRIPTORS: *Polymers, *Ethylenes, Elasticity, Crystal structure, Physical properties.

Four samples of polyethylene which differed widely in crystallinity were studied. The crystallinity and dynamic modulus were measured from 25°C to the melting point. The dynamid modulus drops rapidly as the melting point is approached and the more crystalline (Materials--Plastics, TT, v. 6, no. 8) (over)

61-16570

I. Uematsu, Y.
II. Title: Effect...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Dielectric Properties of Polyvinyl Chloride Prepared at Low Temperature, by M. Asahina, T. Tabata, 6 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVII, No 181, 1960, pp 325-328.

AT3-96444J

203,551

Sci

Jul 62

Vol 4, No 12.

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Effect of Heat Treatment on the Dielectric Properties of Nylon 66 and Nylon 6., by T. Tabata, 7 pp.

JAPANESE, per, Kobunshi Kagaku, Vol XVII, No 181, 1960, pp 329-332.

ATS-97[illegible]J
ATS-JJ-3084

203.555

Sci
Jul 62
Vol 4, No 12

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Tsuda, Yoshizo.
RADIOTRACER STUDY OF AQUEOUS POLYMERIZATION OF ACRYLONITRILE USING POTASSIUM PERSULFATE AS INITIATOR. [1961] 8p. 10 refs.
Order from RIS $17.50 RIS C-136

Trans. from Kobunshi Kagaku (Japan) 1960, v. 17, no. 182.

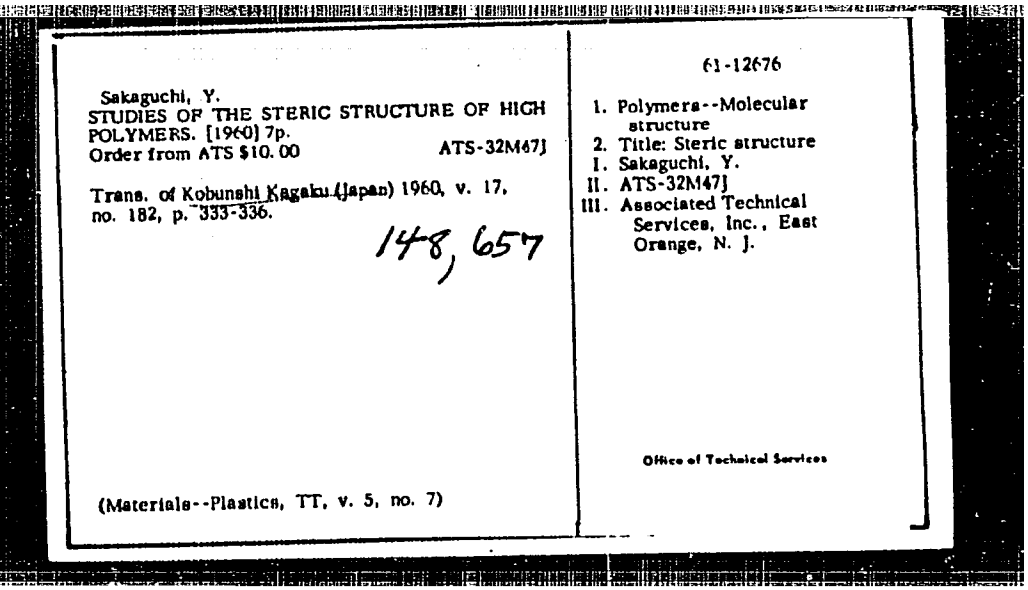
(Chemistry--Organic, TT, v. 5, no. 11)

61-32167

1. Acrylonitrile--Polymerization
2. Sulfur Isotopes (Radioactive)--Applications
3. Potassium sulfates--Chemical reactions
I. Tsuda, Y.
II. RIS C-136
III. Research Information Service, New York

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0



Sakaguchi, Y.
STUDIES OF THE STERIC STRUCTURE OF HIGH POLYMERS. [1960] 7p.
Order from ATS $10.00 ATS-32M47J

Trans. of Kobunshi Kagaku (Japan) 1960, v. 17, no. 182, p. 333-336.

148,657

(Materials--Plastics, TT, v. 5, no. 7)

61-12676

1. Polymers--Molecular structure
2. Title: Steric structure
I. Sakaguchi, Y.
II. ATS-32M47J
III. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Tsuda, Yoshizo.
A RADIOTRACER STUDY OF AQUEOUS POLYMERIZATION OF ACRYLONITRILE USING POTASSIUM PERSULFATE INITIATOR. [1960] 10p. 10 refs.
Order from SLA mi$1.80, ph$1.80 61-10594

Trans. of Kobunshi Kagaku (Japan) 1960, v. 17, no. 182, p. 364-366.

An aqueous polymerization of acrylonitrile at 60°C was studied radiochemically using S^{35}-labeled potassium persulfate initiator. The number average molecular weight of polyacrylonitrile was estimated from the limiting viscosity number of N-, N-dimethylformamide solution at 25°C. The number of initiator fragments per polymer molecule was determined to be about one. It was also shown that the chain termination occurs dominantly by bimolecular reaction. These results indicate that the disproportionation is the dominant chain-terminating process. (English abstract appended to original)
(Chemistry--Organic, TT, v. 5, no. 12)

61-10594

1. Acrylonitriles--Polymerization
2. Potassium sulfates--Catalytic properties
3. Polymerization--Stimulation
4. Radioactivation analysis--Applications
I. Tsuda, Y.

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Nakamura, Kōichi.
RUPTURE BEHAVIOR OF PLASTICIZED FILMS. Rept. no. 4 of Studies on the Fracture of Cellulose Triacetate Films. [1961] 13p. 7 refs.
Order from SLA mi$2.40, ph$3.30 61-10596

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 183, p. 403-407.

Several types of commercial plasticizers were mixed with cellulose acetate and the resulting relations with the static and impact rupture energies were studied. Results indicated that for a specific plasticizer Boyer's equation (J. Appl. Phys. 22: 723, 1951) is valid for the relationship between the plasticizer quantity and the tensile strength. Toughness and impact rupture energy are highest by the use of a plasticizer whose solvent power is of the degree causing a slight swelling of cellulose triacetate. Furukawa's equation $\ln E = \ln E_0 - \{1+\exp(h''/kT)\} \cdot x/\{1+\exp(h/kT)\}$, is applicable to the relationship be-
(Materials--Plastics, TT, v. 5, no. 12) (over)

61-10596

1. Plastic films--Mechanical properties
2. Plasticizers--Test results
I. Nakamura, K.
II. Title: Studies...

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Makamura, Kōichi.
RELATIONSHIP BETWEEN THE SOLVENT POWER OF MIXED SOLVENTS AND THE FILM STRENGTH. Rept. no. 5 of [Studies on the Fracture of Cellulose Triacetate Films]. [1961] 15p. 8 refs.
Order from SLA mi$2.40, ph$3.30 61-10595

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 183, p. 407-412.

Experiments showed that methylene chloride-ethanol (85:15) and chloroform-ethanol (80:20) are good solvents for cellulose triacetate, and the respective solvent compositions give the best rupture behavior. Salts diminish the dissolving property of the polymer and lower the mechanical strength. (See also 61-10596)

(Materials--Plastics, TT, v. 5, no. 12)

61-10595

1. Plastic films--Mechanical properties
2. Organic solvents--Physical effects
I. Makamura, K.
II. Title: Studies ...

148580

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Korematsu, M., Masuda, H., and Kuriyama, S. ORIENTATION AND CRYSTALLIZATION IN POLYESTERS. [1961] 9p. 17 refs.
Order from RIS $25.00 RIS C-135

Trans. from Kobunshi Kagaku (Japan) 1960, v. 17, no. 184.

(Physics--Solid State, TT, v. 5, no. 11)

61-22186

1. Ethylene polymers--Crystallization
I. Korematsu, M.
II. Masuda, H.
III. Kuriyama, S.
IV. RIS C-135
V. Research Information Service, New York

13915

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Kawai, Wasaburo and Tsutsumi, Shigeru.
POLYMERIZATION OF VINYL CHLORIDE CATALYZED BY N-BUTYLLITHIUM AND BORONTRIFLUORIDE ETHERATE. [1961] 7p. 11 refs.
Order from RIS $15.00 RIS C-134

Trans. from Kobunshi Kagaku (Japan) 1960, v. 17, no. 184.

(Chemistry--Organic, TT, v. 5, no. 11)

61-22185

1. Vinyl chloride--Polymerization
2. Lithium compounds (Organic)--Catalytic properties
3. Boron fluorides--Catalytic properties
I. Kawai, W.
II. Tsutsumi, S.
III. RIS C-134
IV. Research Information Service, New York

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Changes Undergone by Polyamides on Heating at High Temperatures. II - Kinetic Treatment, by Y. Matsuda.

JAPANESE, pur, Kobunshi Kagaku, Vol XVII, 1960, pp 413-416.

NLL M 8841

Sci - Chem, & Engr
Mar 63

523,697

Thermal Conductivity of Low Pressure Polyethylene,
by Makoto Hattori, 14 pp.
JAPANESE, per, Kobunshi Kagaku, Vol XVII, 1960,
pp 432-435. 9225321
AEC-SC-T-64-1610

Sci-Phys
Dec 64

269,362

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Asahina, Mitsuo and Okuba, Kansuke.
X-RAY INVESTIGATIONS OF POLYVINYL CHLORIDE. I. ON PECULIAR REFLECTIONS FOUND IN FIBER DIAGRAMS. [1961] 7p. 5 refs.
Order from RIS $15.00 RIS C-137

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 183. p. 441-444.

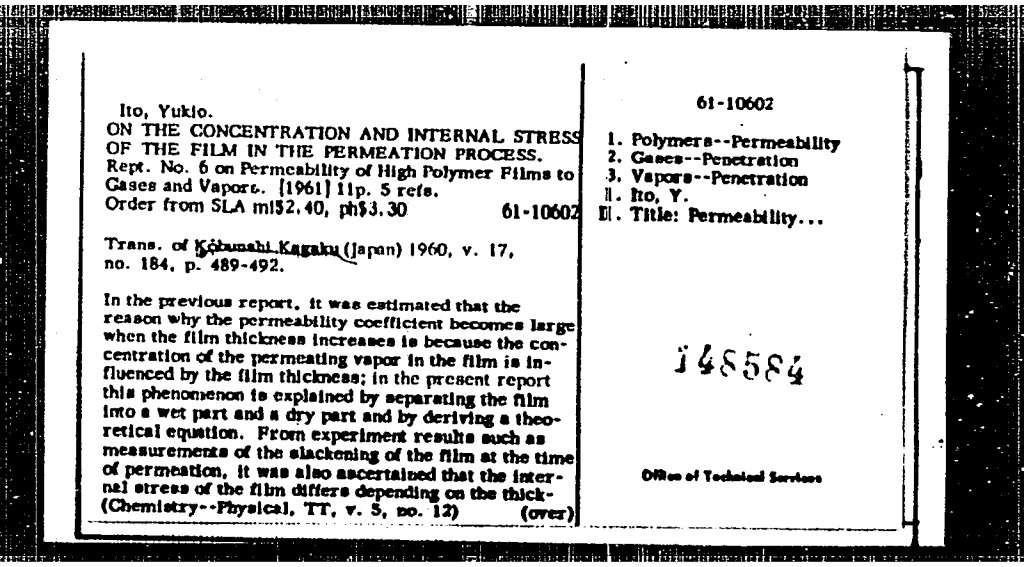
(Chemistry--Organic, TT, v. 5, no. 11)

61-22193
(63-23421)

I. Vinyl polymers--X-ray analysis
I. Asahina, M.
II. Okuba, K.
III. Title: On...
IV. RIS C-137
V. Research Information Service, New York

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0



Ito, Yukio.
ON THE CONCENTRATION AND INTERNAL STRESS OF THE FILM IN THE PERMEATION PROCESS.
Rept. No. 6 on Permeability of High Polymer Films to Gases and Vapors. [1961] 11p. 5 refs.
Order from SLA mf$2.40, ph$3.30 61-10602

Trans. of Kôbunshi Kagaku (Japan) 1960, v. 17, no. 184, p. 489-492.

In the previous report, it was estimated that the reason why the permeability coefficient becomes large when the film thickness increases is because the concentration of the permeating vapor in the film is influenced by the film thickness; in the present report this phenomenon is explained by separating the film into a wet part and a dry part and by deriving a theoretical equation. From experiment results such as measurements of the slackening of the film at the time of permeation, it was also ascertained that the internal stress of the film differs depending on the thick-
(Chemistry--Physical, TT, v. 5, no. 12) (over)

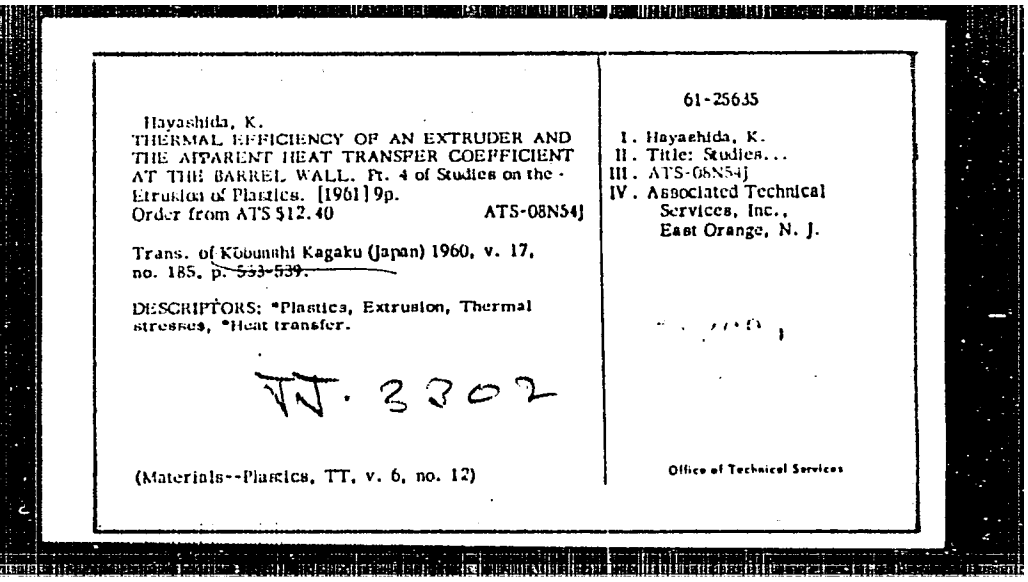
61-10602

1. Polymers--Permeability
2. Gases--Penetration
3. Vapors--Penetration
II. Ito, Y.
III. Title: Permeability...

148584

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0



Hayashida, K.
THERMAL EFFICIENCY OF AN EXTRUDER AND THE APPARENT HEAT TRANSFER COEFFICIENT AT THE BARREL WALL. Pt. 4 of Studies on the Extrusion of Plastics. [1961] 9p.
Order from ATS $12.40 ATS-08N54J

Trans. of Kobunshi Kagaku (Japan) 1960, v. 17, no. 185, p. 533-539.

DESCRIPTORS: *Plastics, Extrusion, Thermal stresses, *Heat transfer.

TT. 3302

(Materials--Plastics, TT, v. 6, no. 12)

61-25635

I. Hayashida, K.
II. Title: Studies...
III. ATS-08N54J
IV. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

X-Ray Investigations of Polyvinyl Chloride, by M. Asahina, K. Okuda. JAPANESE, per, Kobunshi Kagaku, Vol XVII, 1960, pp 441-444; 607-611; 612-614.
NASA TT F-9770

Sci-Phys
Mar 66
U. S. GOVERNMENT USE ONLY 297,422

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Akazome, Giichi, Sakai, Shizuyoshi, and Murai, Koichi.
COPOLYMERIZATION OF HIGHER ALKYL VINYL ETHERS. VII. COPOLYMERIZATION WITH MALEIC ANHYDRIDE. [1961] 7p. 8 refs.
Order from SA $15.00 SA Code-2

Trans. of Kobunshi Kagaku (Japan) 1960, v. 17, no. 186, p. 618-620.

DESCRIPTORS: *Alkyl radicals, *Vinyl radicals, *Ethers, *Copolymerization, Polymerization, *Maleic anhydride, Anhydrides, Chemical reactions

Copolymerization between vinyl ethers having saturated linear alkyl groups of 8 to 18 carbons and maleic anhydride was examined. Block or solution copolymerization of higher alkyl vinyl ethers with maleic

(Chemistry--Organic, TT, v. 7, no. 5) (over)

62-12403

I. Akazome, G.
II. Sakai, S.
III. Murai, K.
IV. Title: Copolymerization with...
V. SA Code-2
VI. Seizaburo Aoki (Japan)

REVERS TRAN to FRENCH by OTS 62-26485

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Akazome, Gitchi, Sakai, Shizuyoshi, and Murai, Kōichi.
PREPARATION AND PROPERTIES OF COPOLYMERS WITH VINYL ALCOHOL. [1961] 14p. 8 refs.
Order from SLA $1.60 61-16537

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 186, p. 621-627.

DESCRIPTORS: *Polymers, Synthesis *Copolymerization, Mechanical properties, *Vinyl alcohol, Vinyl radicals, Acetates, Ethers.

Copolymers of higher alkyl (from octyl to octadecyl) vinyl ethers with vinyl acetate were prepared by bulk polymerization at about 10% conversion, and the polymers produced were saponified to polyvinyl alcohols containing some alkoxy groups. The alkoxy groups in copolymers are not affected by saponification. The copolymers with vinyl alcohol (VA) are insoluble in hot
(Chemistry--Organic, TT, v. 6, no. 6) (over)

61-16537
63-22182
I. Akazome, G.
II. Sakai, S.
III. Murai, K.
ATS JJ-3858
176549

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Akazome, G., Sakai, S. and others.
COPOLYMERIZATION OF HIGHER ALKYL VINYL ETHERS. IX. MONOMER REACTIVITY RATIONS OF HIGHER ALKYL VINYL ETHERS. [1963] 6p.
Order from ATS $8.00 ATS-22Q69J

Trans. of Kobunshi Kagaku (Japan) 1960, v. 17 [no. 186] p. 627-630

DESCRIPTORS: *Alkyl radicals, *Vinyl radicals, *Ethers, *Copolymerization, Polymerization, Chemical reactions.

(Chemistry--Organic, TT, v. 10, no. 7)

63-17453

I. Title: Alkyl vinyl ethers
I. Akazome, G.
II. Sakai, S.
III. ATS-22Q69J
IV. Associated Technical Services, Inc., East Orange, N. J.
V. Title: Monomer...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Higashimura, Toshinobu and Okamura, Seizo.
THE BEHAVIOR OF VINYL ACETATE AND ACRYLIC ACID DERIVATIVES IN CATIONIC POLYMERIZATION. [1961] 15p. 15 refs.
Order from SLA $1.60 61-16518

Trans. of Kobunshi Kagaku (Japan) 1960, v. 17, no. 186, p. 635-640.

DESCRIPTORS: *Polymerization, Copolymerization, *Styrenes, Vinyl radicals *Acetates, Acrylic resins, Chemical reactions, Carbon, Ions.

The cationic homopolymerization and copolymerization of styrene and vinyl monomers which are less active than styrene and have side chains stabilizing the carbonium ions, i.e., vinyl acetate (VAc), methyl methacrylate (MMA), and methyl acrylate (MA), were studied. These monomers retarded the polymerization of styrene extremely and it was presumed that not only transfer and/or termination by these monomers but the reaction

(Chemistry--Organic, TT, v. 6, no. 6) (over)

61-16518

I. Higashimura, T.
II. Okamura, S.

176541

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Meshitsuka, Gisuke, Kamachi, Mikiharu, and Hirota, Kozo.
BLOCK-COPOLYMERIZATION BY METALLIC SODIUM. I. BLOCK-COPOLYMERIZATION OF STYRENE AND α-METHYL STYRENE. [1961]
5p. 6 refs.
Order from SA $15.00 SA Code-7

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 186, p. 641-643.

DESCRIPTORS: *Styrenes, *Methyl radicals, Copolymerization, Polymerization, Sodium, Catalysts, Catalysis, Polymers.

(Chemistry--Organic, TT, v. 7, no. 5)

62-12404

1. Title: Block copolymerization
I. Meshitsuka, G.
II. Kamachi, M.
III. Hirota, K.
IV. Title: Block-Copolymerization. . .
V. SA Code-7
VI. Seizaburo Aoki (Japan)

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Miyamichi, K. and Katayama, M.
STUDIES [ON] SOLUTIONS OF ACRYLONITRILE POLYMERS. #I. VISCOSITY OF DILUTE SOLUTIONS OF POLYACRYLONITRILE. [1961] 6p.
Order from ATS $10.25 ATS-43N56J

Trans. of Kōbunshi Kagaku (Japan) 1960, v. 17, no. 187, p. 672-675.
Another trans. is available from FT $8.50 as FT-1101 [1961].

DESCRIPTORS: *Acrylonitriles, *Polymers, Viscosity, Polymer solutions.

(Chemistry--Organic, TT, v. 7, no. 10)

62-12073

I. Miyamichi, K.
II. Katayama, M.
III. Title: Studies ...
IV. ATS-43N56J
V. Associated Technical Services, Inc., East Orange, N. J.

ATS-JJ-3087

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Studies on the Heat Treatment of Nylon 6 Fiber. Part IX. The Change in the Infrared Spectrum of Heat-Treated Nylon 6 After Deuteration, by A. Koshimo.
JAPANESE, per, Kobunshi Kagaku, Vol 17, No 187, 1960, pp 679-684.
NTC 71-13608-11E

Feb 72

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Fukumoto, Osamu.
EQUILIBRIA BETWEEN POLYCAPRAMIDE AND WATER. III. THEORETICAL TREATMENT ON THE DEGREE OF POLYMERIZATION, THE MELT VISCOSITY AND THE SOLUTION VISCOSITY OF MULTI-CHAIN POLYCAPRAMIDE.][1961] 8p. 3 refs. Order from SA $15.00 SA Code-47

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 189, p. 22-25.

DESCRIPTORS: *Lactams, Polymerization, Temperature, *Amides, *Polymers, Water, Chemical equilibrium, Vapor pressure, Viscosity, Theory.

The relationships among the temperature of polymerization, the vapor pressure of water and the number average or weight average degree of polymerization

(Chemistry--Organic, TT, v. 7, no. 5) (over)

62-12407

I. Fukumoto, O.
II. Title: Theoretical. . .
III. SA Code-47
IV. Seizaburo Aoki (Japan)

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Takahashi, Masao.
STUDIES ON ACRYLIC FIBER. XXVI. EFFECTS OF SPINNING CONDITIONS ON THE FINE STRUCTURE OF FILAMENTS. [1961] 10p. 4 refs.
Order from SA $15.00 SA Code-66

Trans. of Kōbunshi Kagaku (Japan) 1961, v. 18, no. 191, p. 163-168.

DESCRIPTORS: *Acrylonitriles, *Synthetic fibers, Fibers, Processing, Porosity, Coagulation, Filaments, Electron, Microscopy, Microstructure.

(Materials--Textiles, TT, v. 7, no. 5)

62-12408

I. Takahashi, M.
II. Title: Effects...
III. SA Code-66
IV. Seizaburo Aoki (Japan)

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Minematsu, Yoichi and Yamada, Taizo.
PHOTODEGRADATION OF POLYVINYL CHLORIDE AND THE EFFECT OF STABILIZERS. Rept. no. 11 of the Effect of Light on Polyvinyl Chloride. [1962] 15p. 16 refs.
Order from SLA $1.60 62-10701

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 191, p. 175-182.

DESCRIPTORS: *Vinyl chlorides, Polymers, *Photolysis, Stabilization.

The effect of stabilizers on the weatherometer photodegradation (in air) of PVC was studied. In order to dissolve and disperse the stabilizers uniformly in the PVC by the solution method, chlorostearates and 2-ethylhexanoates were compounded as the stabilizers, and dibutyl Sn system stabilizers too were used. By
(Engineering--Chemical, TT, v. 8, no. 9) (over)

62-10701

I. Minematsu, Y.
II. Yamada, T.
III. Title: Effect ...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Ishida, Shin-ichi.
STEREOSPECIFIC POLYMERIZATION OF ACETALDEHYDE, 1. 1961, 7p. 3 refs.
Order from SA $50.00

Trans. of Kobunshi Kagaku (Japan) [1961] v. 18, no. 191, p. 187-190.

DESCRIPTORS: *Acetaldehydes, Polymerization, Catalysts, Temperature, Chemical reactions.

(Chemistry--Organic, TT, v. 7, no. 7)

61-25540

1. Title: Stereospecific polymerization
I. Ishida, S.
II. Seizaburo Aoki (Japan)

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Endo, Ryuichi.
MOLECULAR WEIGHT DISTRIBUTION OF ELASTOMERS. III. THE EFFECT OF MASTICATION ON THE MOLECULAR WEIGHT DISTRIBUTION OF HEVEA RUBBER. [1961] 11p. 12 refs
Order from SA 515.00

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 192, p. 214-219.

DESCRIPTORS: *Elastomers, *Rubber, Processing, Mastication, Molecular weight, Distribution, Viscosity, Osmotic pressure, Pressure, Measurement.

Hevea rubber was masticated by means of a roller, samples being prepared varying the mastication time. Fractions of these samples were made by fractional precipitation, and their viscosities and osmotic pressures were measured to know the distribution of mo-
(Materials--Elastomers, TT, v. 7, no. 3) (over)

62-12320

I. Endo, R.
II. Seizaburo Aoki (Japan)

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Kodama, Tsuneo, Higashimura, Toshinobu, and Okamura, Seizo.
LOW TEMPERATURE CATIONIC POLYMERIZATION OF ALKYL VINYL ETHERS AND THE PROPERTIES OF POLYMERS OBTAINED. VII. EFFECT OF THE POLYMERIZATION CONDITIONS ON THE PROPERTIES OF POLYVINYL METHYL AND ETHYL ETHERS. Oct 62, 10p. 15 refs.
Order from SA $19.00 SA Code-G81

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 192, p. 267-272.

DESCRIPTORS: Alkyl radicals, *Vinyl radicals, *Ethyl ethers, *Methyl ethers, Polymerization, Ions, *Stereochemistry, X-ray diffraction analysis, Physical properties.

(Chemistry--Organic, TT, v. 9, no. 1)

63-12092

I. Kodama, T.
II. Higashimura, T.
III. Okamura, S.
IV. Title: Effect...
V. SA Code-G81
VI. Seizaburo Aoki (Japan)

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Imanishi, Y., Higashimura, T., and Okamura, S. ISOBUTENE. Pt. 2 of the Relation Between the Nature of Growing Ion Pairs and the Rate Constant Ratios in Cationic Polymerizations. [1962] 10p.
Order from ATS $15.00 ATS-05P63J

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 194, p. 333-338.

DESCRIPTORS: *Butenes, Reaction kinetics, *Ions, *Polymerization.

(Chemistry--Organic, TT, v. 9, no. 1)

62-34221

I. Imanishi, Y.
II. Higashimura, T.
III. Okamura, S.
IV. Title: Relation...
V. ATS-05P63J
VI. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Kawaguchi, T.
BEHAVIOR OF DRAWN HIGH POLYMERS NEAR THE GLASS TEMPERATURE. [1961] 9p.
Order from ATS $13.75 ATS-92N56J

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 194, p. 351-356.

DESCRIPTORS: *Polymers, Behavior, Glass, Temperature.

(Chemistry--Organic, TT, v. 7, no. 10)

62-12071

I. Kawaguchi, T.
II. ATS-92N56J
III. Associated Technical Services, Inc., East Orange, N. J

ATS-JJ-3097

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Studies of the Cationic Copolymerization of Isobutene. Part 1. Copolymerization with Styrene or α-methylstyrene, by S. Okamura.
JAPANESE, per, Kobunshi Kagaku, Vol 18, No 195, 1961, pp 389-395.
ATS-JS-205

Sci-Chem
Mar 70

403,878

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Sakurada, Y.
COPOLYMERIZATION OF STYRENE AND 2-METHYL-5-VINYLPRIDINE IN THE PRESENCE OF $Al(C_2H_5)_3$-$TiCl_4$ AS A CATALYST. [1962] 11p.
Order from ATS $20.00 ATS-27P59J

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 196, p. 496-503.

DESCRIPTORS: *Copolymerization, *Styrenes, *Methyl radicals, *Vinyl radicals, *Pyridines, Catalysts, Aluminum compounds, Ethyl radicals, Titanium compounds, Chlorides

(Chemistry--Organic, TT, v. 7, no. 11)

62-12821

I. Sakurada, Y.
II. ATS-27P59J
III. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Yamaoka, H., Hagashimura, T., and Okamura, S. STUDY OF THE CATIONIC POLYMERIZATION OF ALKYL VINYL ETHERS BY HETEROGENEOUS CATALYSTS. PT. 1. POLYMERIZATION OF ISO-BUTYL VINYL ETHER CATALYZED BY METAL SURFATE-SULFURIC ACID COMPLEXES [1963] 8p. Order from ATS $11.50 ATS-32Q70J

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 197, p. 560-566.

DESCRIPTORS: *Vinyl plastics, Vinyl radicals, Alkyl radicals, Butyl radicals, Ethers, Polymerization, *Catalysts, *Complex compounds, Metallic compounds, *Sulfuric acid.

(Materials--Plastics, TT, v. 10, no. 9)

63-22154

I. Yamaoka, H.
II. Hagashimura, T.
III. Okamura, S.
IV. ATS-32Q70J
V. Associated Technical Services, Inc., East Orange, N. J.
VI. Title: Polymerization ...

ATS JJ-3861

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Fujisaki, Yoshisato.
EFFECT OF MOLECULAR WEIGHT. Rept. 1 of Studies on the Effects of Molecular Weight and Molecular Weight Distribution on the Spinning Property of Concentrated Polyacrylonitrile Solutions.
[1962] 16p. 11 refs.
Order from SLA $1.60 62-18041

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 198, p. 589-595.

DESCRIPTORS: Synthetic fibers, *Plastics, Polymers, *Acrylonitriles, *Molecular weight, Drawing (Machine processing), Coagulation, Nitric acid.

In order to study the effects of molecular weight the drawing properties of coagulated threads of polyacrylonitrile were measured at 100°C. Polyacrylonitrile was prepared by the suspension polymerization method (Materials--Textiles, TT, v. 8, no. 9) (over)

62-18041

I. Fujisaki, Y.
II. Title: Studies . . .

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Takahashi, Masao.
MODEL-WISE OBSERVATION OF DESOLVATION IN THE SPINNING BATH. Rept. 35 of Studies on Acrylic Fiber. [1962] 8p. 1 ref.
Order from SLA $1.10 62-18036

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 198, p. 605-608.

DESCRIPTORS: *Acrylonitriles, *Synthetic fibers, Fibers, Processing, Filaments.

The desolvation process of formed filaments in solvent-water system spinning bath was observed. The composition of the swelling liquid changed gradually and approached the composition of the steeping bath. The apparent diffusion coefficient of desolvation at this time, k_θ, was sensitive to the coagulant structure, and it was possible to evaluate the coagulation process and the structure of the filaments from this value. The
(Materials--Textiles, TT, v. 8, no. 8) (over)

62-18036

1. Title: Spinning
I. Takahashi, M.
II. Title: Studies ...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

62-16002

Yamaguchi, Tadashi and Amagasa, Masataka.
A STUDY ON THERMAL DEGRADATION PRODUCTS OF POLYVINYL ALCOHOL. [1962] 14p. 3 refs.
Order from SLA $1.60 62-16002

I. Yamaguchi, T.
II. Amagasa, M.

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 198, p. 645-652.

DESCRIPTORS: Polymers, *Vinyl alcohols, Pyrolysis, Chemical analysis, Acetaldehydes, Benzaldehydes, Acetophenones, Alcohols, Vinyl radicals.

In order to probe the mechanism of thermal decomposition of PVA, the residue from thermal decomposition of PVA and thermal decomposition products of PVA were investigated. There were some differences in quantity depending on whether the thermal decomposition took place in vacuum, in nitrogen current, or in the presence of air, but as decomposition products we
(Chemistry--Organic, TT, v. 9, no. 1) (over)

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Yamaguchi, Tadashi and Amagasa, Masataka.
THERMAL DEGRADATION MECHANISM OF POLY-VINYL ALCOHOL. [1962] 6p. 4 refs.
Order from SLA $1.10 62-16001

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 198, p. 653-655.

DESCRIPTORS: Polymers, *Vinyl alcohols, Pyrolysis, Chemical reactions, Alcohols, Vinyl radicals.

The thermal degradation mechanism of polyvinyl alcohol (PVA) is discussed according to the results of investigation about colorisation and degradation at heat treatment. (See also 62-16002)

(Chemistry--Organic, TT, v. 9, no. 1)

62-16001

I. Yamaguchi, T.
II. Amagasa, M.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Fujisaki, Yoshisato.
EFFECT OF MOLECULAR WEIGHT DISTRIBUTION. Rept. 2 of Studies on the Effects of Molecular Weight and Molecular Weight Distribution on the Spinning Property of Concentrated Polyacrylonitrile Solutions. [1962] 12p. 3 refs.
Order from SLA $1.60 62-16014

Trans. of Kobunshi Kagaku (Japan) 1961, v. 18, no. 199, p. 667-673.

DESCRIPTORS: *Synthetic fibers, *Acrylonitriles, *Molecular weight, Distribution, Physical properties, Nitric acid.

Unfractionated polyacrylonitriles were dissolved in 70% nitric acid. These solutions were extruded into a dilute nitric acid solution. After the coagulation they were scored. Relations between the stretchabilities of coagulated threads thus obtained and those of their compo-
(Materials--Textiles, TT, v. 9, no. 3) (over)

62-16014

1. Fujisaki, Y.
II. Title: Studies...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Yagi, S., Kunii, D. and others.
STUDIES ON AXIAL MIXING OF PARTICLES IN MOVING BEDS. [1962] 11p.
Order from ATS $17.55 ATS-57P58J

Trans. of Kagaku (Kogaku) (Japan) 1961, v. 25, no. 6, p. 469-476.

DESCRIPTORS: *Particles, Motion, *Fluidized solids.

(Engineering--Chemical, TT, v. 7, no. 11)

62-12808

I. Yagi, S.
II. Kunii, D.
III. ATS-57P58J
IV. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Asai, H.
CONCENTRATED CYCLOHEXANONE SOLUTION OF POLY (VINYL CHLORIDE). Pt. 1 of Properties of Concentrated Solutions of High Polymers. [1962] 8p.
Order from ATS $11.00 ATS-56P64J

Trans. of Kobunshi Kagaku (Japan) 1962, v. 19, no. 201, p. 19-24.

DESCRIPTORS: *Polymers, Solutions, *Cyclohexanones, *Vinyl chlorides, Chemical properties, Chlorides, Vinyl radicals.

(Chemistry--Organic, TT, v. 9, no. 2)

63-12012

I. Asai, H.
II. Title: Properties ...
III. ATS-56P64J
IV. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Fractionation of Polyacrylonitrile. III. Fractional Precipitation in the Dimethyl Sulfoxide-Toluene System (Introductory Paragraphs Omitted), by Y. Fujisaki.

JAPANESE, per, Kobunshi Kagaku. Vol XIX, No 201, 1962, pp 49-56.

Possibly to Come From Contacts per 10 Dec 62 memo
USIB INTERNAL USE ONLY

Sci - Chem
Dec 62

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

V. Precipitation Fractionation of Polyacrylonitrile (Introductory Paragraphs Omitted), by Y. Fujisaki.

JAPANESE, per, Kobunshi Kagaku, Vol XIX, No 201, 1962, pp 64-72.

Possibly to Come From Contacts
per 10 Dec 62 memo
USIB INTERNAL USE ONLY

Sci - Chem

Dec 62

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Study on Polyacrylonitrile Solution. II. Molecular [redacted] Weight Dependence of Intrinsic Viscosity, Secon Virial Coefficient and end-to-end Distance of the Polymer Chain, (Introductory Paragraphs Omitted), by J. Jujisaki.

Kobunski Kagaku,
JAPANESE, per, [redacted], Vol XIX, No 201, 1962, pp 73-80.

Possibly to Come From Contacts
per 10 Dec 62 memo
USIB INTERNAL USE ONLY

Sci - Chem
Dec 62

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

III. Intrinsic Viscosity-Temperature Relationships for Polyacrylonitrile in Various Solvents, by Y. Fujisaki.

JAPANESE, per, Kobunshi Kagaku, Vol XIX, No 201, 1962, pp 81-93.

Possibly to Come From Contacts
per 10 Dec 62 memo
USIB INTERNAL USE ONLY

Sci - Chem
Dec 62

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Kitazawa, T., Tadokoro, H. and others.
THE RELATIONSHIP BETWEEN INFRARED ABSORPTION SPECTRA AND THE DEGREE OF POLYMERIZATION OF POLYOXYMETHYLENE, AND THE ORIENTATION OF MOLECULAR CHAINS IN FILM SAMPLES. [1963] 8p.
Order from ATS $10.00 ATS-29Q69J

Trans. of Kobunshi Kagaku (Japan) 1962, v. 19, no. 203, p. 148-153.

DESCRIPTORS: *Infrared films, *Infrared photography, Absorption, *Absorption spectrum, Polymerization, Polymers, Spectra (Infrared).

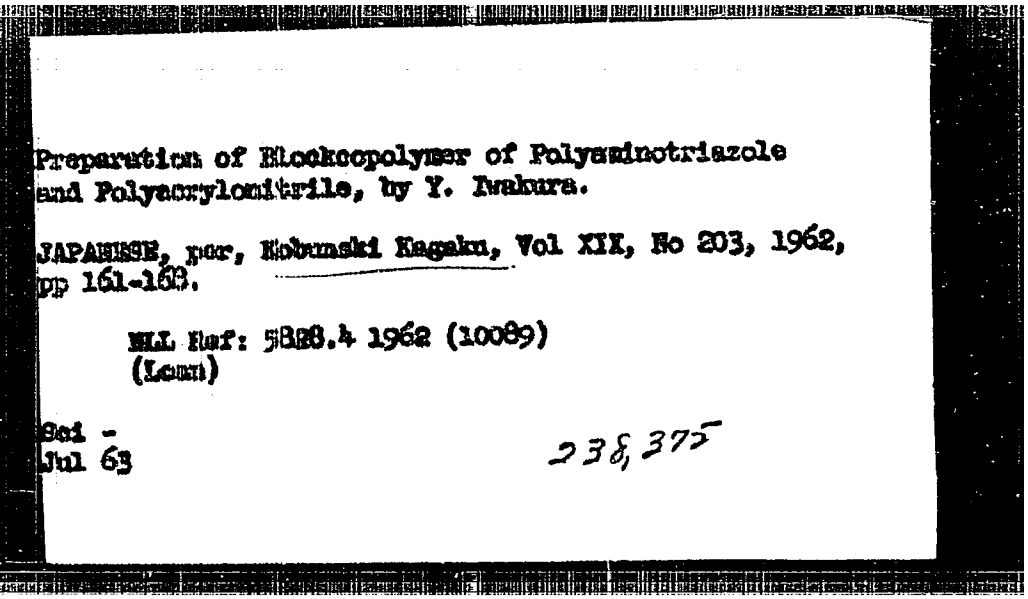
(Materials--Photographic, TT, v. 10, no. 6)

63-17781

I. Title: Polyoxymethylene
I. Kitazawa, T.
II. Tadokoro, H.
III. ATS-29Q69J
IV. Associated Technical Services, Inc., East Orange, N. J.

ATS JJ-3850

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0



Preparation of Blockcopolymer of Polyaminotriazole and Polyacrylonitrile, by Y. Iwakura.

JAPANESE, per, Kobunshi Kagaku, Vol XIX, No 203, 1962, pp 161-163.

MLL Ref: 5328.4 1962 (10089)
(Lcm)

Sci -
Jul 63

238,375

Iodine Treatment of Nylon 6. II. Change in Infra Red Spectrum of Nylon 6 by Iodine Treatment, by H. Arimoto.

[redacted]
JAPANESE, per, Kobunshi Kagaku, Vol XIX, No 204, 1962, pp 205-211.

HLL Ref: 5828.4 1962 (10108)
(Loan)

238,372

Sci - M/M
Jul 63

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Noro, Ken and Takida, Hiroshi.
INVESTIGATION OF THE REDOX SYSTEM. Rept. 1 of Solution Polymerization of Vinyl Acetate with Redox Initiator at Low Temperature. [1962] 14p. 32 refs.
Order from SLA $1.60 63-10084

Trans. of Kobunshi Kagaku (Japan) 1962, v. 19, no. 204, p. 239-244.

DESCRIPTORS: *Vinyl radicals, *Acetates, *Polymerization, *Oxidation-reduction reactions, Catalysts, Reagents, Methanols, Solutions, Vinyl plastics.

Methanol solution polymerization of vinyl acetate (VAc) was conducted at 30°C and at 0°C with respect to redox systems regarded as being effective up to now, redox systems which are expected to be effective, and, for comparison, a number of single initiators which have been claimed to be low-temperature active. The objective was to acquire information regarding redox low-temperature solution polymerization of VAc.
(Chemistry--Organic, TT, v. 9, no. 11)

63-10084

I. Noro, K.
II. Takida, H.
III. Title: Solution ...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Noro, Ken and Takida, Hiroshi.
POLYMERIZATION BY t-BUTYL PERBENZOATE-l-ASCORBIC ACID SYSTEM. Rept. 2 of Solution Polymerization of Vinyl Acetate with Redox Initiator at Low Temperatures. [1962] 14p. 30 refs.
Order from SLA $1.60 62-18982

Trans. of Kobunshi Kagaku (Japan) 1962, v. 19, no. 204, p. 245-251.

DESCRIPTORS: *Polymerization, Butyl radicals, Benzoates, *Ascorbic acid, *Vinyl radicals, *Acetates, Oxidation-reduction reactions, Low-temperature research, Methanols.

Solution polymerization of vinyl acetate in methanol was studied in the temperature range of 30° to -20° C with t-butyl perbenzoate- l-ascorbic acid. The optimum mole ratio of t-butyl perbenzoate for l-ascorbic acid was 4/1. The average apparent activation energy for
(Chemistry--Organic, TT, v. 9, no. 6) (over)

62-18982

I. Noro, K.
II. Takida, H.
III. Title: Solution ...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0

Noro, Ken and Takida, Hiroshi.
STUDIES ON POLYVINYL ALCOHOL. Rept. 3 of Solution Polymerization of Vinyl Acetate with Redox Initiator at Low Temperatures. [1962] 9p. 11 refs.
Order from SLA $1.10 62-18981

Trans. of Kobunshi Kagaku (Japan) 1962, v. 19, no. 204, p. 251-255.

DESCRIPTORS: *Polyvinyl alcohol, *Polymerization, *Acetates, *Vinyl radicals, *Oxidation-reduction reactions, Infrared spectroscopy, Ultraviolet spectroscopy, Low-temperature research.

Properties of polyvinyl alcohol derived from polyvinyl acetate which was polymerized in methanol with t-butyl-l-ascorbic acid redox initiator at low temperatures were studied. It was found that the equilibrium degree of swelling and densities of PVA films obtained at various temperatures had not significant difference but the
(Chemistry--Organic, TT, v. 9, no. 6) (over)

62-18981

I. Noro, K.
II. Takida, H.
III. Title: Solution ...

Office of Technical Services

APPROVED FOR RELEASE: Tuesday, June 04, 2002 CIA-RDP84-00581R000301080006-0